

**STATEMENT OF BASIS (AI No. 28215)**

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0088978** to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Samson Rope Technologies  
Lafayette Division  
Post Office Box 88000  
Lafayette, LA 70598-8000

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Lisa Kemp

**DATE PREPARED:** March 24, 2010

**1. PERMIT STATUS****A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

**B. LPDES permits –**

LPDES permit effective date: May 1, 2005  
LPDES permit expiration date: April 30, 2010  
EPA has not retained enforcement authority.

**C. Date Application Received:** October 28, 2009

**2. FACILITY INFORMATION****A. FACILITY TYPE/ACTIVITY - cordage manufacturing**

This is an existing facility which manufactures organic and synthetic fiber rope. Propylene pellets are melted in an extruder and go through a cooling process. Potable well water is piped into reservoirs on extruders to cool down melted polypropylene monofilament which is used to manufacture rope. The synthetic yarn is twisted to form strands. The strands are then used to form rope of different varieties. Production is approximately 3 million pounds per year. Sanitary wastewater is connected to the local POTW.

**B. FEE RATE**

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC code: 2298,3089

**C. LOCATION -** 200 Southpark Road, in Lafayette, Lafayette Parish  
Latitude 30° 09' 58", Longitude 91° 59' 12"

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### 3. OUTFALL INFORMATION

#### Outfall 001 (application Outfall 101)

Discharge Type: once-through contact cooling water  
Treatment: none  
Location: at the point of discharge from the extruder outlet line, prior to combining with other waters (flow will be estimated based on the cooling water inflow meter reading – see Rationale)  
Flow: 42,087 gpd  
(from DMR review September, 2007 through September, 2009)  
Discharge Route: local drainage to Coulee Des Poches

#### Other Discharges

Stormwater runoff, air conditioner condensate, compressor condensate and sprinkler system test water are also discharged from the facility. Additives are not used in the air conditioner or compressor. The sprinkler system is tested once per year using potable water. Based on the LPDES Multi-Sector General Permit (MSGP), stormwater runoff, fire system sprinkler system test water, and uncontaminated air conditioning and compressor condensate will be covered by the Stormwater Pollution Prevention Plan requirements (see Narrative Requirements for the AI).

### 4. RECEIVING WATERS

STREAM - local drainage to Coulee Des Poches

BASIN AND SEGMENT - Vermilion-Teche River Basin, Segment 060801

DESIGNATED USES - a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife  
f. agriculture

### 5. TMDL STATUS

Subsegment 060801, Vermilion River - from headwaters to LA-3073 bridge, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for nutrients (phosphorus and nitrogen), organic enrichment/low DO, suspended solids/turbidity/siltation, pathogen indicators, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

Fecal coliform, nutrients, and carbofuran are not among the effluent characteristics of the discharge from this facility. Therefore, the discharges from this facility should not cause or contribute to the violation of water quality standards for these parameters.

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The following TMDL's have been established for subsegment 060801:

Organic Enrichment/Low DO

Per the EPA's *Vermilion River Dissolved Oxygen and Nitrogen TMDL*, the limits apply to sanitary dischargers, and process outfalls of food processors and seafood processors. This TMDL re-established that NPDES permits for individual point sources should continue to be issued on the basis of flow rates.

This facility does not have a sanitary discharge. Based on an evaluation of the contact cooling water discharge from Outfall 001, it was determined that the facility has the potential to discharge pollutants which may contribute to the organic enrichment/low dissolved oxygen impairment of the receiving stream. BOD limits included in the permit will address this impairment.

Suspended Solids/Turbidity/Siltation

The discharge from this facility also has the potential to discharge pollutants that may contribute to the suspended solids impairment of the receiving stream. As per the *TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin*, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. TSS limits included in the permit will address this impairment.

**6. CHANGES FROM PREVIOUS PERMIT**

1. Due to an increase in the average flow, mass loadings have been increased. See Rationale for calculations.

**7. COMPLIANCE HISTORY/COMMENTS**

- A. Inspections – there are no inspections on file in the last five years.
- B. OEC – There are no open, appealed, or pending OEC enforcement actions as of February 11, 2010.
- C. DMR Review/Excursions – DMRs were reviewed for the period September, 2007 through September, 2009. For the period September, 2008 to September, 2009, DMRs are only on file once per quarter instead of once per month as required by the permit. The following excursions were noted:

Parameter	Outfall	Monitoring Period End Date	Permit Limit	Reported Quantity
No report on file	001	August, 2009		
No report on file	001	July, 2009		
No report on file	001	May, 2009		
No report on file	001	April, 2009		
No report on file	001	February, 2009		
No report on file	001	January, 2009		

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Parameter	Outfall	Monitoring Period End Date	Permit Limit	Reported Quantity
No report on file	001	December, 2008		
No report on file	001	November, 2008		
No report on file	001	September, 2008		
No report on file	001	July, 2008		
BOD <sub>5</sub>	001	May, 2008	4.12 lb/day	7.04 lb/day
pH	001	February, 2008	6.0 s.u. (min)	5.75 s. u.
No sample taken	001	January, 2008		
TSS	001	October, 2007	3.01 lb/day	22.13 lb/day
Oil and Grease	001	September, 2007	4.60 lb/day	10.07 lb/day

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

- D. Permit Actions Taken: Facility was referred to enforcement for nonsubmittal of DMRs. The facility was referred to Surveillance for a compliance inspection because there were inspections on file in the last five years.

## 8. EXISTING EFFLUENT LIMITS

Pollutant	Limitation		Monitoring Frequency
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (gpd)	Report	Report	monthly
BOD <sub>5</sub>	---	4.12 lb/day	monthly
TSS	---	3.01 lb/day	monthly
Oil and Grease	---	4.60 lb/day	monthly
pH s.u.	6.0 (min)	9.0 (max)	monthly

## 9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060801 of the Vermilion-Tecche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Ricck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore,

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the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

#### **10. HISTORIC SITES**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

#### **11. TENTATIVE DETERMINATION**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

#### **12. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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### Rationale for Samson Rope Technologies

1. **Outfall 001** - once-through contact cooling water (estimated flow is 0.042 MGD)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	lbs/day (unless stated)		
Flow (gpd)	Report	Report	LAC 33:IX.2707.1.1.b.
BOD <sub>5</sub>	---	9.11	40 CFR 463.12, Subpart A
Oil and Grease	---	10.2	40 CFR 463.12, Subpart A
TSS	---	6.66	40 CFR 463.12, Subpart A
pH (standard units)	6.0 (min)	9.0 (max)	40 CFR 463.12, Subpart A

**Treatment:** none

**Monitoring Frequency:** once per month at the point of discharge from the extruder outlet line, prior to combining with other waters (flow will be estimated based on the cooling water inflow meter reading\*). Monitoring frequency is based on the previous permit and existing permits for similar facilities.

**Limits Justification:** Limits were based on 40 CFR 463.12 Subpart A, Plastics Molding and Forming Point Source Category, Contact Cooling and Heating Water Subcategory, Best Practicable Control Technology (BPT) for this subcategory.

\* According to the January, 2005 Statement of Basis, Samson was unable to install a flow meter on the outlet line of the extruder. However, a meter could be installed on the inlet line. It was the opinion of facility engineers that since very little water is lost in the process, the difference should be insignificant. Samson Rope requested that the facility be allowed to use a meter installed on the inlet line to estimate the effluent flow from the cooling water tank. The Office agreed to this request. Therefore, the effluent flow will be estimated based on the cooling water inflow meter reading.

#### Calculation of Limits

Daily Maximum:

$$\text{BOD}_5 = (26 \text{ mg/l}) (0.042 \text{ MGD}) (8.34) = 9.11 \text{ lbs/day}$$

$$\text{Oil and Grease} = (29 \text{ mg/l}) (0.042 \text{ MGD}) (8.34) = 10.2 \text{ lbs/day}$$

$$\text{TSS} = (19 \text{ mg/l}) (0.042 \text{ MGD}) (8.34) = 6.66 \text{ lbs/day}$$

BPJ      Best Professional Judgement  
 su        Standard Units

#### NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

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### **STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC codes 2298 and 3089 are considered to have storm water discharges associated with industrial activity.

**For first time permit issuance**, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).